

ABSTRACT OF THE DISCLOSURE

A method is described for determining a physical property of a log or similar wood member. A small amount of a liquid or solid is projected against the end of the log with sufficient energy to induce a stress wave. Water is a preferred liquid and an
5 ice pellet is the preferred solid material. A water pulse of about 40 g or less shot from a distance of about 1.2 m with about 9-10,000 kPa pressure will induce a useful shock wave. Similarly an ice pellet weighing 5-10 g shot from the same distance at about 400-500 kPa has given excellent results. The travel time of the stress wave may be measured by an accelerometer in contact with the log. Alternatively, a laser Doppler vibrometer
10 aimed at the log end can record the travel time. The use of the method obviates the need for a mechanical hammer striking the log as well as the requirement for the logs to be even ended at the test location.